

2003

AUGUST DATA

The new month arrived at the same time as the talk of "hotter weather" began to appear in the forecasts. With August being the last month of "summer" this could present the last occasion for any really hot weather to materialise as days are by now beginning to show marked signs of shortening. As the first week progressed it became hotter day by day, with an air maximum of 30.3C/86.5F on the 4th during a day with ample sunshine, though it did remain cloudy much of the time. The "media" began their usual game of pumping up talk of "record-breaking" temperatures as though we had never experienced temperatures like this before. In fact, it was nowhere near "record-breaking" with a long way to go before the all-time high at Cheltenham of 37.1C/98.8F is breached.

Days were quite sunny with values over 13 hours on some days and it remained dry with just a few spots of rain on the 5th when thunder was heard to the southeast near Bromsgrove, the total here amounting to a mere 0.1mm/tr inch. The heat was made even more oppressive by the high humidity's being experienced on some afternoons and the nights were often so uncomfortable that sleep was impaired in many households.

Early August saw maximum air temperatures climbing as high as 33.1C/91.6F which was by now rapidly approaching the record 34.7C/94.5F set on August 3rd 1990. Black bulb radiation peaked at 60.1C/140.2F on the 9th whilst the

grass fell as low as 5.4C/41.7F on the 2nd. It was soil temperatures that were impressive, the mean 5cm depth reaching 21.7C/71.1F over the period attaining a maximum of 24.3C/75.7F on the 9th. Even the 30cm

[1ft] depth reached a mean of 18.9C/66.0F and a maximum of 20.5C/68.9F on the 10th. With such high values it is not surprising to find plants struggling to survive in such conditions. London [Heath Row] broke the record high temperature of 37.1C/98.8F on the 9th when the mercury climbed above 38C/101F for the first time in the U.K. whilst the rest of the country, and much of Europe, sizzled in the oppressive heat.

Unfortunately for the gardens, rainfall totalled a mere 3.0mm/0.12in, the highest daily fall being just 2.9mm/0.11in on the 10th, insufficient for anything other than laying the dust! Set against this evaporation totalled 33.0mm/1.30in with a maximum daily total of 4.9mm/0.19in on the 9th. This has thus resulted in a water deficit for the 10-day period of 30mm/1.18ins, a figure to indicate that problems with water supply could be just around the corner.

The impressive evaporation totals have been aided by the large daily sunshine totals as well as low humidity's and light winds. The 10-day sunshine total was 95.3 hours with 13.8 hours of this on the 2nd. Winds were equally divided between easterly and westerly at 50% each, being both light with a mean speed of 5.6knots/6.4mph and a maximum gust no higher than 28knots/32mph.

This has been the hottest spell of weather since that of 1990 and in part, 1995. Areas of Continental Europe have fared even worse with wide-

spread drought, woodland fires and deaths of elderly citizens from heat stroke. Such conditions are tolerable for short periods only, and soon everyone was looking to the Meteorological Office for some signs of relief. This was forecast for the middle part of the month when the intense heat was expected to become somewhat moderated, though little sign of substantial rain could be seen.

Though the very oppressive weather came to a gradual end, days remained hot with maxima in the mid to upper 20'sC/70'sF. Further thunder occurred on the 10th and 11th but this was not accompanied by much rain, the dry spell continuing unabated. The soil was baked hard with substantial cracking and any rain was rapidly dried up on impact. The 11th was the first sunless day of the month though the mercury still rose as high as 23.3C/73.9F so there was little respite in the heat to be found here!

Mid August saw an end of the intense heat suffered during the early month, the 10-day period 11th to 20th producing a range in temperature from 26.3C/79.3F on the 12th to 7.7C/45.9F on the 20th, much more tolerable conditions. Over the same period the grass fell to 4.7C/40.5F on the 20th with a black bulb radiation maximum of 58.1C/136.6F achieved on the 13th. Earth and soil temperatures continued a slow fall with the maximum of 22.0C/71.6F at 5cm depth on the 13th to a low of 16.3C/61.3F at 20cm on the 20th.